

## ABSTRACT OF THE INVENTION

An automatic injection device includes a drive mechanism and a sensor used to determine an internal characteristic such as a force or internal pressure generated during an injection process. This characteristic is then used as a control parameter by a microprocessor or controller which generates corresponding commands to the drive mechanism. In a particularly advantageous embodiment, the characteristic is used to calculate an exit pressure at which fluid ejected by the device through an elongated tube. The drive mechanism is then operated in such a manner that the exit pressure is maintained at a predetermined level to insure that a patient does not suffer pain and/or tissue damage.